

# Work Order ID 73193

Friday, August 26, 2011 7:16:03 AM



Page 1

Item ID: D4418-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Lug

Start Date: 8/26/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 9/9/2011 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: CL Date: 11/08/26

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4418

A

100

0.00



BAND SAW

0.00

*only 11/09/08*

Bandsaw

Memo

Jeaspa Bandsaw

Cut Blank tO 3.125"

110

0.00



HAAS CNC VERTICAL MACHINING #1

0.00

*only 11/09/12*

HAAS 1

Memo

HAAS CNC vertical machine #1

1-Machine per folio FB0063

DWG REV: A

FOLIO REV: AA

2- deburr rough edges

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB  Memo	0.00  0.00		<i>and 11/09/12</i>		<u>6</u>	<u>0</u>		
130  QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00		<i>Y.A 11/09/13</i>		<u>6</u>	<u>0</u>		
140  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00				<u>6</u>	<u>0</u>	<u>11-9-13</u>	

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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 3

Item ID: D4418-1	Accept		Setup	Start	
Revision ID:				Stop	
Item Name: Step Lug					
Start Date: 8/26/2011	Start Qty: 6.00		Cust Item ID:		
Required Date: 9/9/2011	Req'd Qty: 6.00		Customer:		
Reference:					

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
145  Powdercoat Powder Coating  M118439	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum  Memo <del>MASK THREADED HOLE</del> N/A 9/11/09.13	0.00 0.00							Start Time: 8:20 Temp: 320°F End Time: 8:50 GX/M-11/09/13
146  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00							counted 6 0 M 11/09/13
180  Packaging Packaging	Identify as per dwg & Stock Location: 811394  Memo	0.00 0.00							6 11-09-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 4

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Item Name: Step Lug

Start Date: 8/26/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 9/9/2011 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/9/11  
MF  
11-09-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Friday, August 26, 2011 7:16:00 AM

Page 1

Work Order ID: 73193

Parent Item: D4418-1

Parent Item Name: Step Lug



Start Date: 8/26/2011

Required Date: 9/9/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A NEW ISSUE 11-07-12 JLM VERIFIED BY:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B2.000X03.50 0		Purchased	No			100	f	19.7811	0.26	1.642105			



6061-T6 Bar 2.00 x 3.50

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT003	11.4527	
118182	11.4527	
MAT009	8.3284	
112764	0.7284	
118641	7.6	

1.65 on 11/09/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 73193
<b>Description:</b> STEP 646		<b>Part Number:</b> D4418-1
<b>Inspection Dwg:</b> D4418 Rev: A		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.30	$\pm .030$	3.298	—		Vern ML-06	
2.40	$\pm .030$	2.402	—		"	
R.50	$\pm .030$	R.500	—		"	
R.25	$\pm .030$	R.250	—		R-6	
342	$\pm .010$	340	—		Vern ML-06	
1.13	$\pm .030$	1.122	—		"	
700	$\pm .010$	700	—		"	
3.045	$\pm .010$	3.043	—		"	
.125	$\pm .010$	.127	—		"	
$\varnothing .257$	$\pm .001$	$\varnothing .259$	—		"	
2.88	$\pm .030$	2.877	—		"	
.125	$\pm .010$	.125	—		"	
1.375	$\pm .030$	1.375	—		"	
.675	$\pm .010$	.674	—		"	
.626	$\pm .010$	.625	—		"	
.412	$\pm .010$	.412	—		"	
.438	$\pm .010$	.438	—		"	
R.06	$\pm .030$	R.060	—		R-6	
1.45	$\pm .030$	1.451	—		Vern ML-06	
1.075	$\pm .010$	1.075	—		"	
.188	$\pm .010$	.188	—		"	

<b>Measured by:</b> <i>amf</i>
<b>Date:</b> 11/09/12

<b>Audited by:</b> B.A
<b>Date:</b> 11/09/13

<b>Preliminary Approval:</b>
<b>Date:</b>

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

*10.04.15*

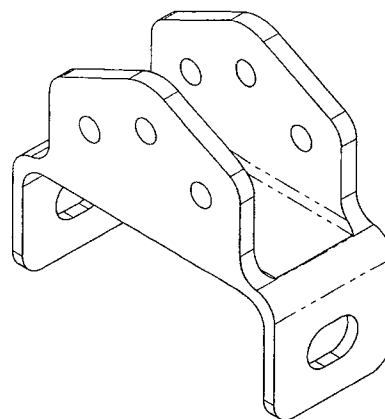
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4418-1 STEP LUG**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 73193

*CL 11/08/24*

**RELEASED**  
2011-07-28  
*AN*

**NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART IDENTIFY WITH DART P/N "D4418-1" AND B/N "BXXXXX"  
PER DART QSI 044 6.1 (FINE POINT MARKER)
- 7) WEIGHT: 0.20 lbs

A		NEW ISSUE		AJS	11.07.04
REV.		DESCRIPTION		BY	DATE
DESIGN		AJS	DART AEROSPACE LTD		
DRAWN		AJS	HAWKESBURY, ONTARIO, CANADA		
CHECKED		<i>[Signature]</i>	DRAWING NO.	REV.	
MFG' APPR.		<i>[Signature]</i>	D4418	SHEET 1 OF 2	
APPROVED		<i>[Signature]</i>	TITLE	SCALE	
DE APPR.		<i>[Signature]</i>	STEP LUG	NT	
DATE		11.07.04	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

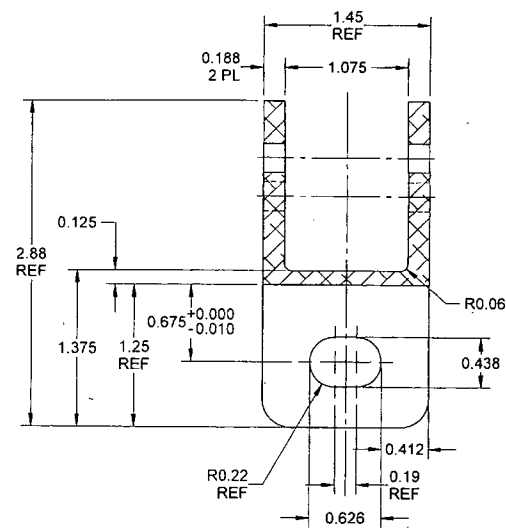
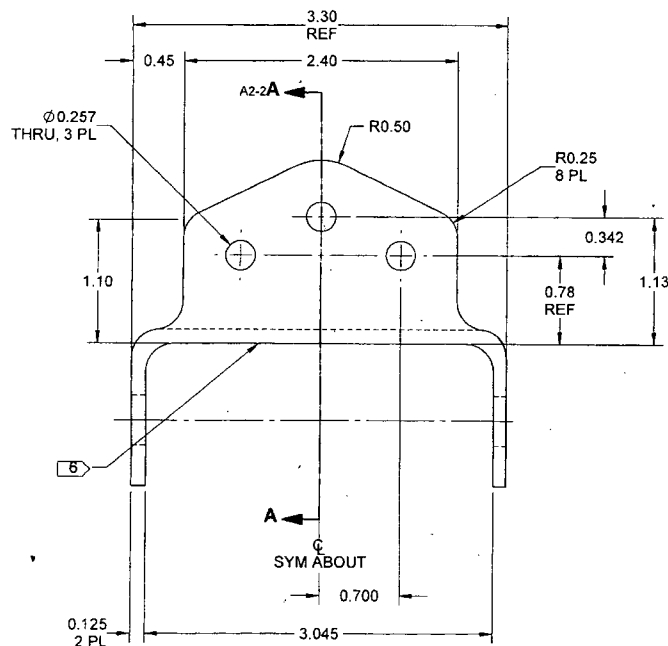
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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GRAIN  
DIRECTION



SECTION A-A C6-2

**RELEASED**  
2011-07-28

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	<b>D4418</b>	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>STEP LUG</b>	NTS
DATE	11.07.04	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

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